Figure 1A

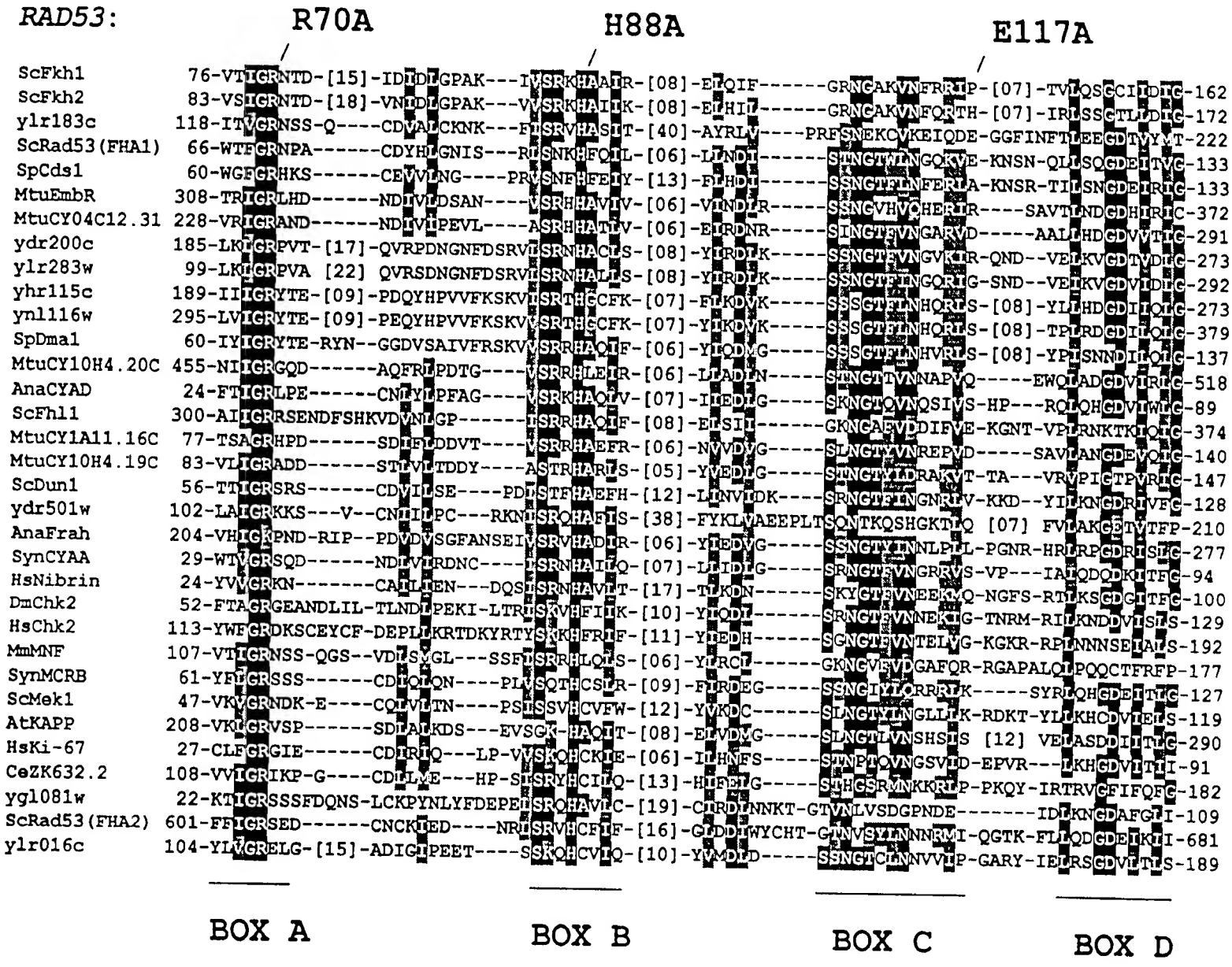

Figure 1B

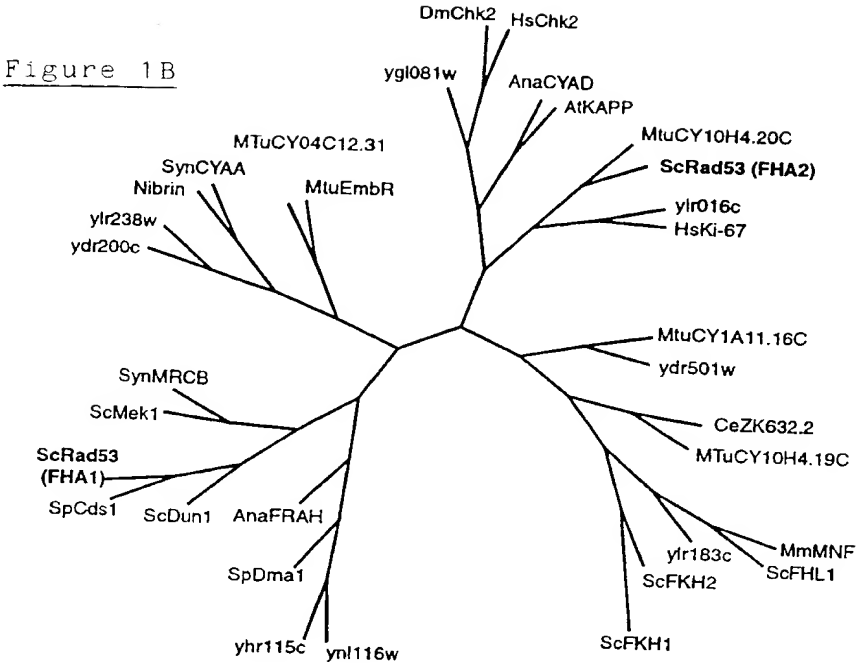


Figure 1C

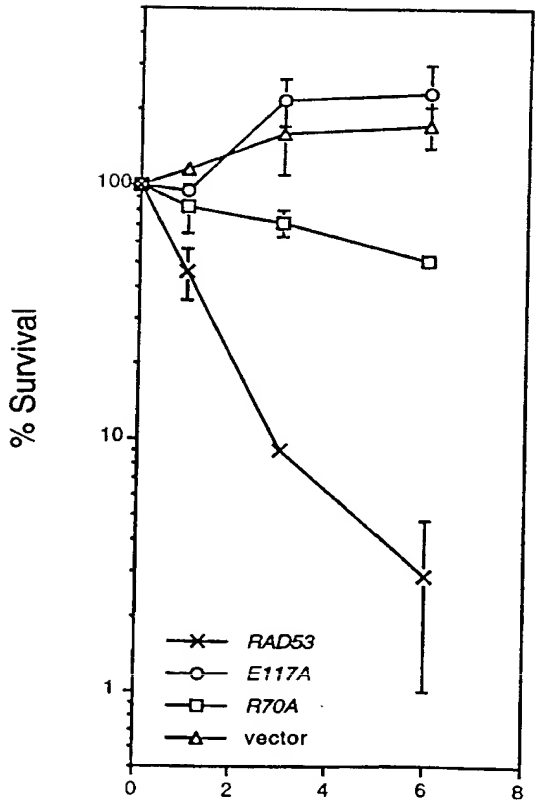


Figure 1D

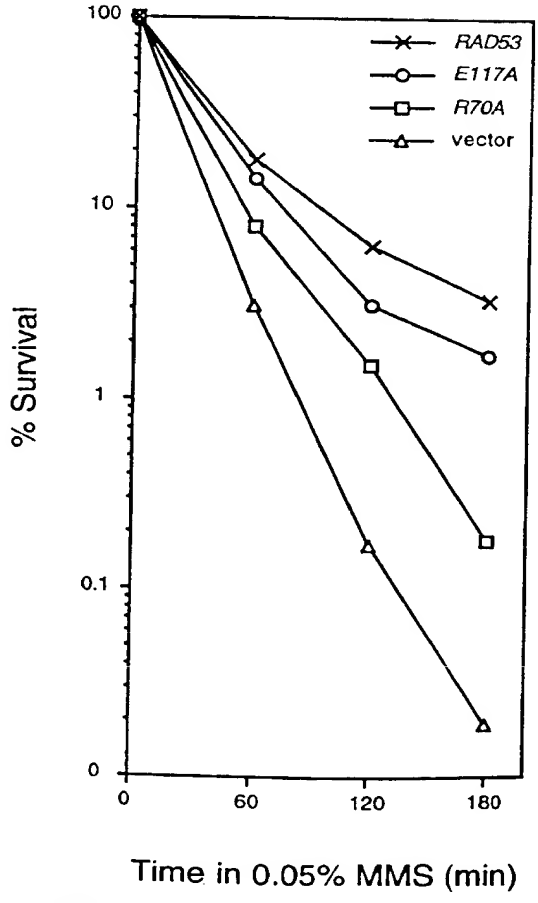

Figure 2

| | |
|---|---|
| APPLSQETFSDLWKL | ST |
| APPLS(P)QETFSDLWKL | S(P)T |
| APPLSQET(P)FSDLWKL | ST(P) |
| APPL**A**QET(P)FSDLWKL | ST(P)-3A |
| APPLS**A**ET(P)FSDLWKL | ST(P)-2A |
| APPLSQ**A**T(P)FSDLWKL | ST(P)-1A |
| APPLSQET(P)**A**SDLWKL | ST(P)+1A |
| APPLSQET(P)F**A**DLWKL | ST(P)+2A |
| APPLSQET(P)FS**A**LWKL | ST(P)+3A |
| AL**AAA**T(P)**AA**DAAL | ST(P)5A |
| AL**AAADAA**DAAL | SD5A |
| APPLSQE**S(P)**FSDLWKL | SS(P) |
| GGKKATQSQEY | H2AS |
| GGKKATQS(P)QEY | H2AS(P) |

Figure 3A

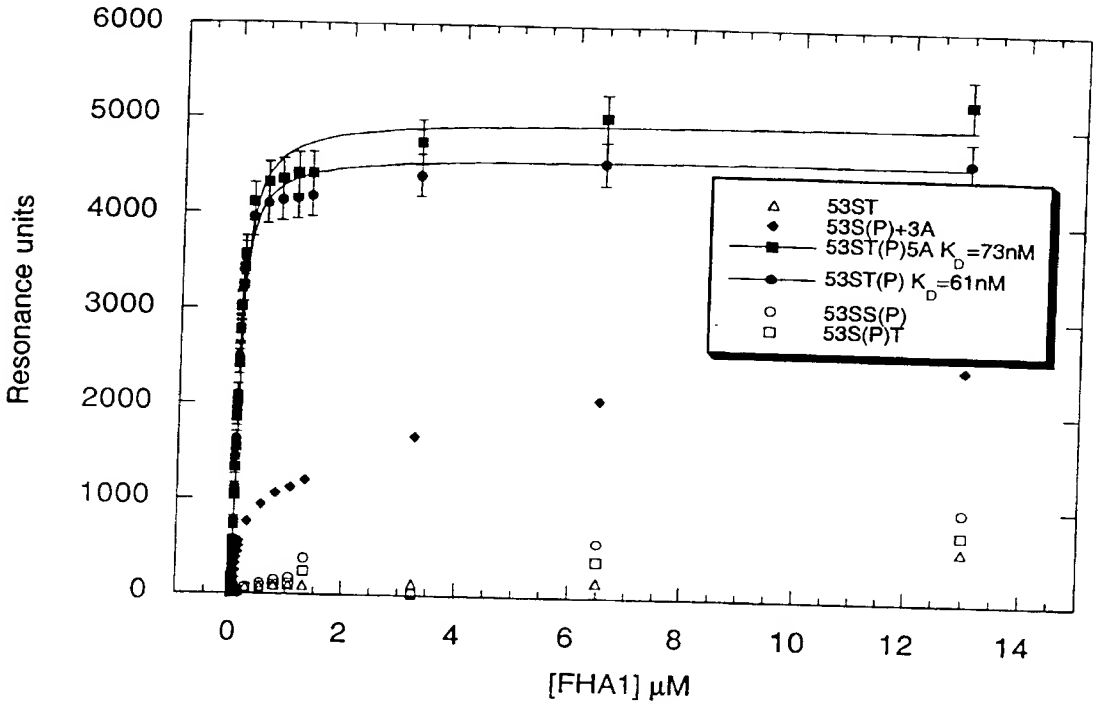


Figure 3B

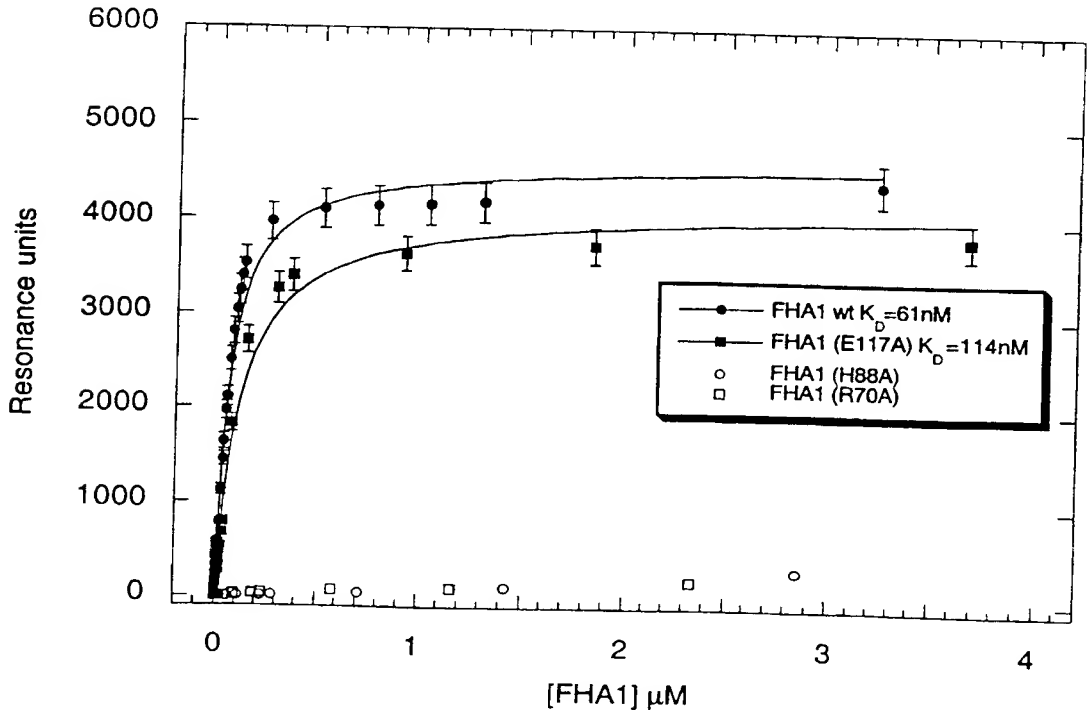

Figure 4

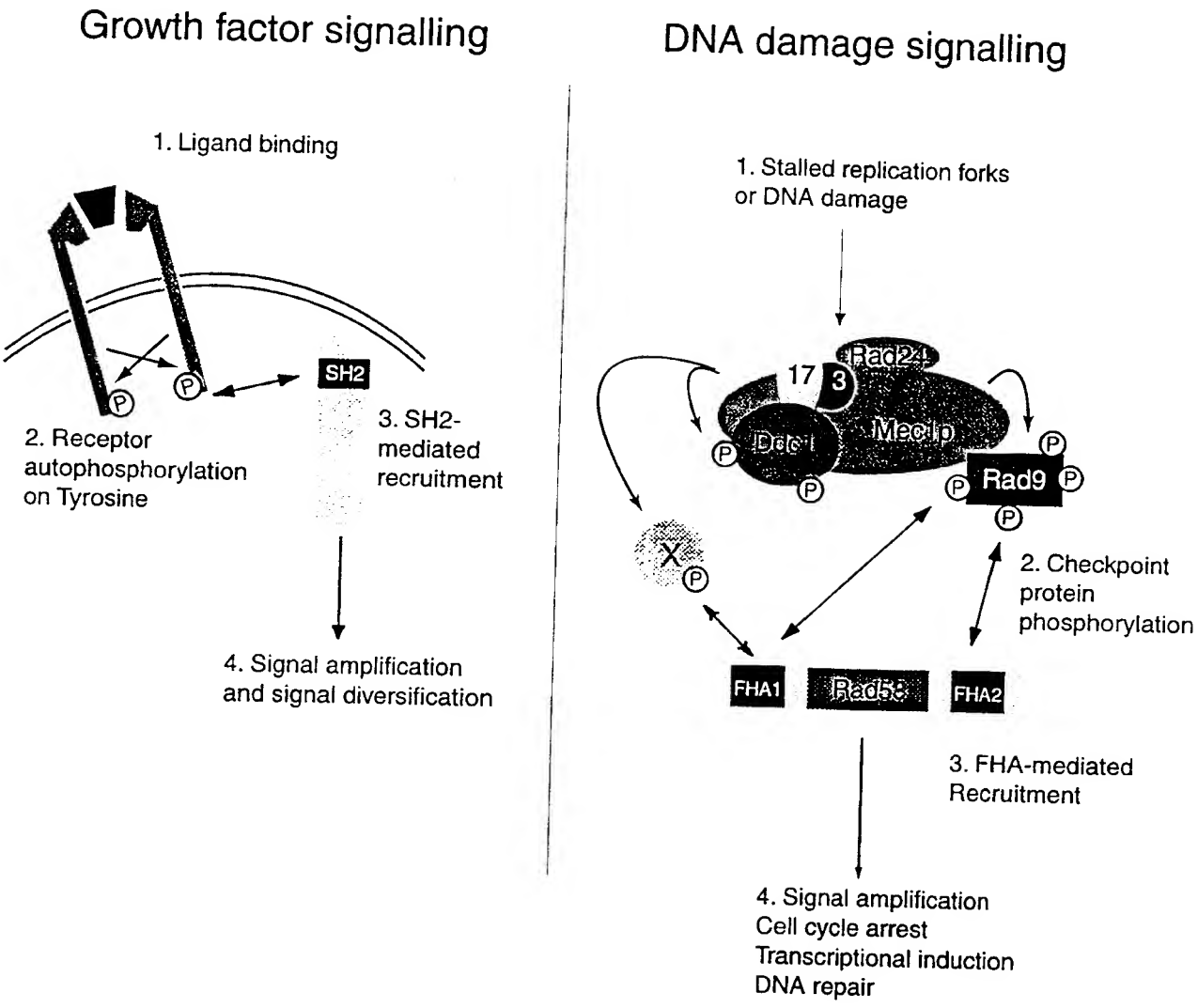
Growth factor signalling
1. Ligand binding
SH2
2. Receptor autophosphorylation on Tyrosine
3. SH2-mediated recruitment
4. Signal amplification and signal diversification
DNA damage signalling
1. Stalled replication forks or DNA damage
17
3
Rad24
Mec1p
Ddc1
Rad9
X
2. Checkpoint protein phosphorylation
FHA1
Rad53
FHA2
3. FHA-mediated Recruitment
4. Signal amplification
Cell cycle arrest
Transcriptional induction
DNA repair

Figure 5

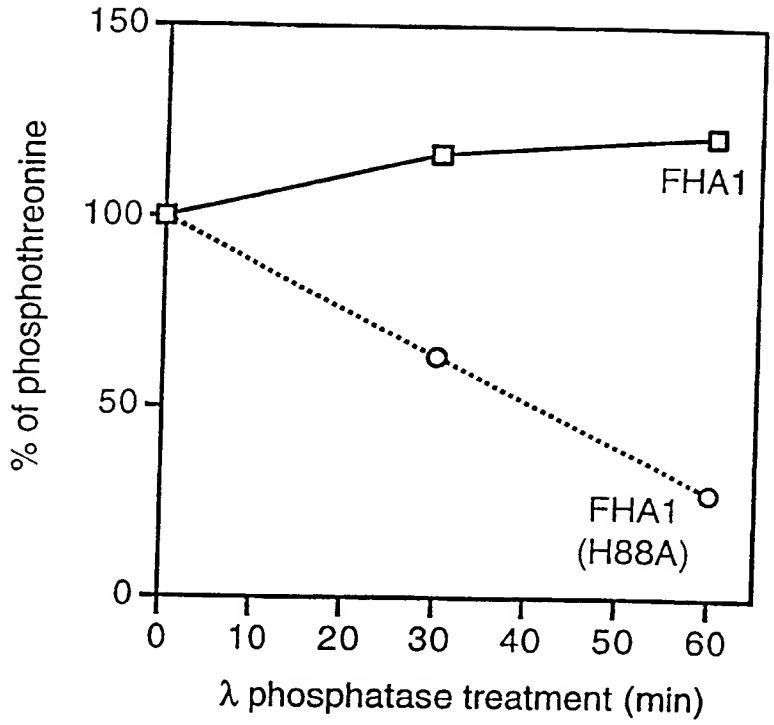
150
100
50
0
% of phosphothreonine
FHA1
FHA1
(H88A)
0
10
20
30
40
50
60
λ phosphatase treatment (min)

Figure 6

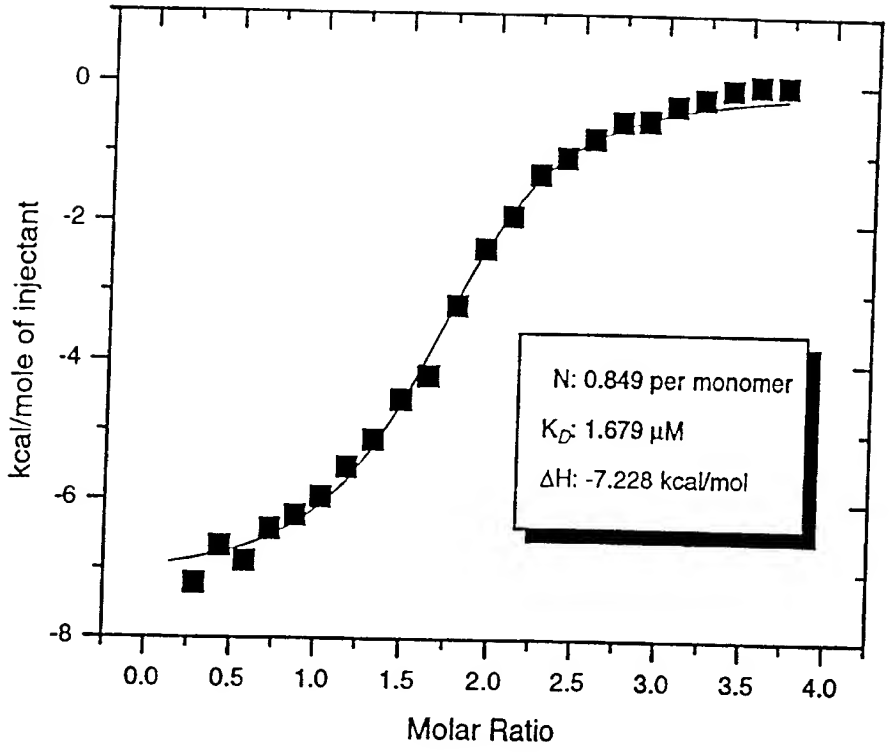
kcal/mole of injectant
0
-2
-4
-6
-8
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
Molar Ratio
N: 0.849 per monomer
$K_D$: 1.679 µM
ΔH: -7.228 kcal/mol

Figure 7

A T : Biotin-SGSYSQETXXXLL
T(P): Biotin-SGSYSQET(P)XXXLL

B